

Reply Comments on WECA Petition for Rulemaking, RM-10371

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1 PURPOSE

Petition for rulemaking to allocate additional spectrum in the 5GHz band for UNII devices.

1.1 airBand Communications

airBand Communications, Inc. a member of the WCA and license exempt alliance is filing in support of the WCA's initial comments for additional spectrum in the 5GHz band for UNII devices.

1.2 About airBand Communications

airBand Communications currently provides high-speed broadband wireless Internet services in four cities throughout the southwest United States. airBand targets small and medium sized business needs for reliable economical communications services. Primarily utilizing UNII for its point to multi-point services for over two years airBand has a realistic idea of the requirements to provide broadband wireless access in the unlicensed bands. Based on our experience with trials in residential markets and ongoing operations in many MTA's a need for additional spectrum and increased output power can easily be justified.

1.3 Spectrum Needs (Increased output power)

Design and operation of BWA for small and medium businesses in residential areas requires a unique approach, as ubiquitous service to all those in an area would be highly desirable. An increased output power would facilitate this goal and help to provide service in an entire area, not just the lucky few with LOS back to a tall building or seldom found, not quite tall enough, tower in a residential area. The additional spectrum (5.4-5.725GHz) would allow airBand to provide a residential service first to those adjacent and within existing business class services; secondly to those in underserved rural areas. This also relates to the need for an increased output power to successfully operate in residential neighborhoods, many of which throughout the US have large groups of mature trees.

Going further to describe the method by which airBand would choose to expand coverage is an incremental fashion. Typically urban areas are built such that residential housing is adjacent to small and medium sized business. Taking advantage of that fact airBand could choose to encroach on residential neighborhoods. By utilizing the existing customer base, expansion would be moved into the adjacent residential neighborhoods, see figure one.

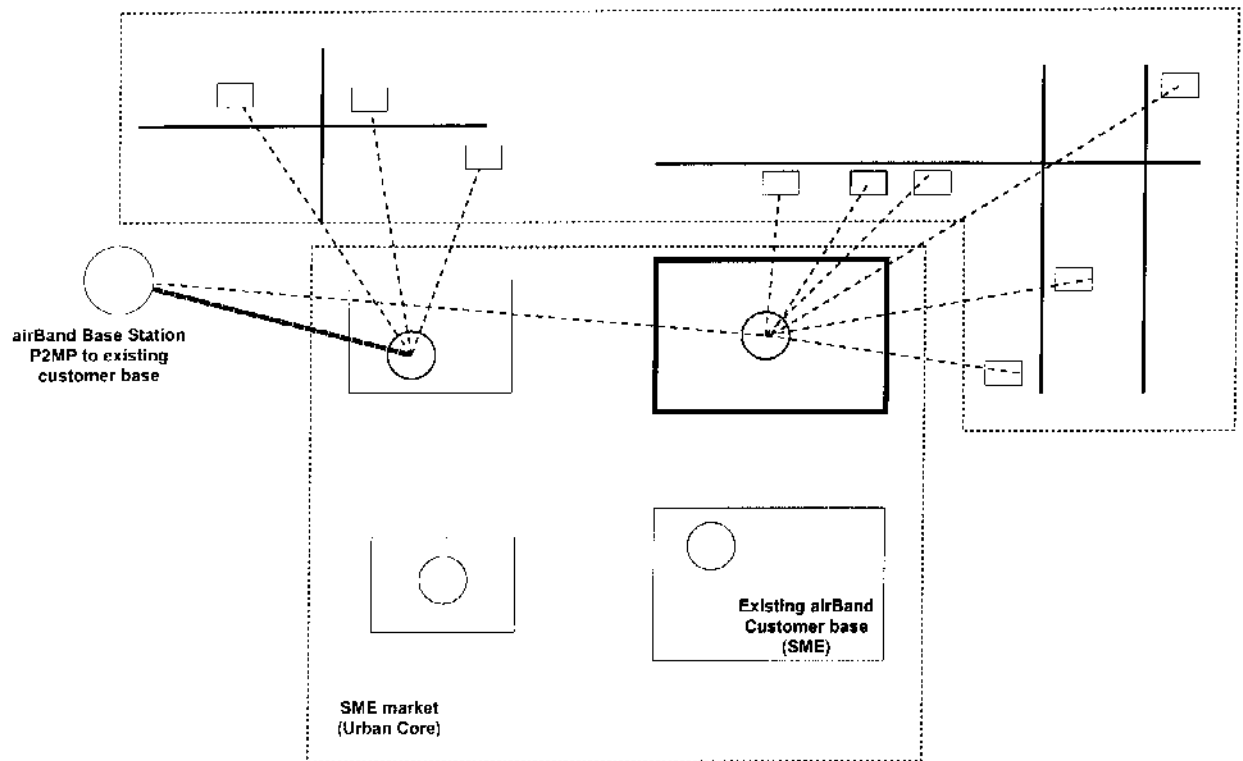


Figure 1 example use of additional spectrum and need for higher output power

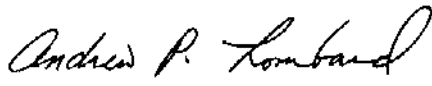
1.4 Spectrum Needs (additional spectrum)

Of course all of this depends on frequency availability as airBand is currently at 85% utilization of the existing UNII spectrum, these additional services would depend on the added spectrum. Without additional spectrum airBand's plan to service residential and underserved areas would not work. Due to the close proximity of SME business and residential area, frequency planning would be difficult if not impossible to accomplish within the current UNII guidelines.

1.5 Summary

The ability to increase power would lead to extended coverage areas and therefore a lower cost model. Higher output power will also expedite the development / deployment of NLOS (Non Line of Site) products.

The ability to add spectrum would further reduce the possibility of interference and allow for more flexibility in adding capacity to very populated areas. Additional frequency would also allow for airBand to offer more services and most likely an increased availability of products in delivering a fixed wireless solution.



March 15, 2002

Andrew P. Lombard
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